

What is claimed is:

1. A nut-plate riveter comprising: a handle; a plurality of pistons disposed in the handle; cavities proximate the pistons for pressurizing the pistons; air supply passages in communication with the cavities for supplying air to the cavities to 5 pressurize the pistons; and a piston rod engaged with at least one of the pistons, said piston rod having a longitudinal bore therethrough configured to receive a spent mandrel.

10 2. A nut-plate riveter as recited in claim 1, wherein the plurality of pistons disposed in the handle comprises a front piston and a rear piston, wherein the piston rod extends through the front piston and is securably engaged with the rear piston.

15 3. A nut-plate riveter as recited in claim 1, wherein the plurality of pistons disposed in the handle comprises three pistons.

4. A nut-plate riveter as recited in claim 1, further comprising a deflector fitting disposed at an end of the nut-plate riveter.

20 5. A nut-plate riveter as recited in claim 1, wherein the piston rod is cylindrical and includes orifices which are configured to allow the passage of air.

6. A nut-plate riveter as recited in claim 1, further comprising a bulkhead which engages an exterior surface of one of the pistons and contacts a wall in the handle.

5 7. A nut-plate riveter as recited in claim 1, further comprising a trigger on the handle for actuating the nut-plate riveter.

10 8. A nut-plate riveter as recited in claim 1, further comprising a front cap sub-assembly comprising a front cap and a bumper member disposed in the front cap, wherein an end of said handle is configured to receive the front cap sub-assembly.

9. A nut-plate riveter as recited in claim 8, wherein the front cap threadably engages the end of the handle.

15 10. A nut-plate riveter as recited in claim 1, further comprising a pulling head which is engaged with said piston rod.

20 11. A nut-plate riveter as recited in claim 10, wherein said pulling head comprises a nose fitting, a sleeve and a drawbar, said sleeve being threadably engaged with said nose fitting, said drawbar being disposed in said sleeve and threadably engaged with said piston rod.

12. A nut-plate riveter as recited in claim 11, wherein said pulling head further comprises a jaw follower sub-assembly and a jaw set, said jaw follower sub-assembly being disposed in the drawbar and contactably engaged with said jaw set.

5 13. A nut-plate riveter as recited in claim 12, wherein said pulling head further comprises a follower spring, said jaw follower sub-assembly engaged with said follower spring, said follower spring being engaged with an interior surface of the piston rod.